



# Caledonian

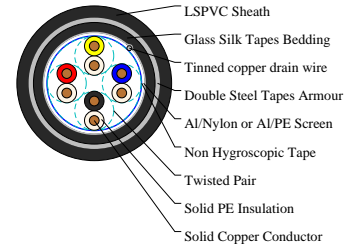
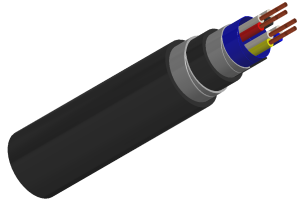
## Railway Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

### K13 PVC Subway Signalling Cables for Metro/Local Trains/Tramlines

RS/K13-2Y(L)2YBY-4P1



### APPLICATIONS

The cables are designed for remote control and teletransmission in underground railway networks. The cables can be laid in channel, cable tray, or on hook supports, along suburban railway lines electrified at maximum 1500V DC

### STANDARDS

AFNOR NF F 55-633

### CABLE CONSTRUCTION

Conductors: Solid copper conductor

Insulation: Polyethylene insulation.

Cabling Element: Pair/Quad.

Stranding: 4-pair cables are composed of pairs, while other cables are composed of star quads.

Spare Pairs: Spare pairs may be provided according to capacity of cables.

Core Wrapping: One or more non-hygroscopic polyester tapes are helically or longitudinally laid with an overlap.

Screen: Aluminium/Nylon tape bonded with a special PVC sealing sheath or Aluminium/PE tape bonded with a halogen-free fire-retardant sheath.

Drain Wire: A tinned copper drain wire, 0.5mm nominal diameter.

Inner sheath: Several glass silk tapes are helically laid with an overlap to form bedding.

Armour: Two helically applied steel tapes.

Outer Sheath: LSPVC.

### COLOUR CODE

4-pair cable:

Pair1: black/courless Pair2: blue/ courless

Pair3: yellow/courless Pair4: red/ courless

Other cable:

Side circuit 1 of a quad a-wire: sequence of black/blue/yellow/red/green/blue/yellow, etc.

b-wire: colourless

Side circuit 2 of a quad a-wire: grey

b-wire: white



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Unit binder: sequence of white/blue/yellow/brown/black/red/green/violet

### PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 8xOD (static); 16xOD (dynamic)

Temperature Range: -40°C to +60°C (during operation); -20°C to +50°C (during installation)

### Electrical Properties

Electrical Characteristics at 20°C:

Nominal Conductor Diameter: 1 mm

Nominal Mutual Capacity: 57.5 nF/km

Minimum Insulation Resistance: 5000 MΩ.km

Maximum Operating Voltage: 500 V

Maximum Permissible Current: 1 A

### DIMENSION AND PARAMETERS

No. of Pairs	Conductor Diameter	Nominal Diameter over Insulation	Nominal Inner Sheath Thickness	Nominal Outer Sheath Thickness	Nom. Overall Diameter	Approx. Weight
	mm	mm	mm	mm	mm	kg/km
4	1	1.8	1	1.2	15.5	340



Acid & Alkaline Resistant



Flame Retardant  
NF C32-670-2.1(C2)  
IEC60332-1-2/EN50265-2-1



Impact Resistant



Laid In Ducts



Low Smoke Emission  
IEC 61034-2 / EN 50268-2  
NF C32-073/NF C 20-902



Mineral Oil Resistant